

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2004-059535

(43)Date of publication of application : 26.02.2004

(51)Int.Cl.

C07C 13/58
C07C 13/615
C07C 15/60
C09K 11/06
H05B 33/14
H05B 33/22

(21)Application number : 2002-222990

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(22)Date of filing : 31.07.2002

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(54) ANTHRACENE DERIVATIVE, LUMINESCENT MATERIAL FOR ORGANIC ELECTROLUMINESCENT ELEMENT AND ORGANIC ELECTROLUMINESCENT ELEMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an organic EL element by which high luminescent brightness and efficiency are obtained in low voltage and power consumption of the organic EL element is reduced, an anthracene derivative realizing the organic EL element and luminescent material for organic EL elements.

SOLUTION: The anthracene derivative is represented by formula

(1) (wherein X is an alkyl group, an aryl group, a cycloalkyl group or the like which may be substituted with a halogen; Ar is a condensed aryl group which may be substituted; Ar' is an aryl group which may be substituted; a and b are each 0-4, with the proviso that a and b are not simultaneously 0; n is 1-3). The luminescent material for organic EL elements is composed of the derivative. The organic EL element sandwiches one or a plurality of organic thin film layers each containing at least a luminescent layer between a cathode and an anode. In the organic EL element, at least one layer of the organic thin film layer contains the anthracene derivative alone or as a component of the mixture.

